

BRUHAT BANGALORE MAHANAGARA PALIKE
DETAILED ESTIMATE FOR THE WORK OF PROVIDING OPEN GYM AT YELAHANKA LAKE
IN WARD NO. 01

Estimated cost Rs.50.00 Lakhs

Sl. No	Description of work	No	Dimensions			qty	Rate/unit	Amount
			L	B	D			
1	Earth work in surface excavation in hard soil for levelling and lowering the ground manually (other than foundation of buildings, culverts, road drains and trenches of pipe lines and cables) and removing the excavated stuff to a distance not exceeding 50m and lift upto 1.50m. excavated surface levelled and neatly dressed, disposed earth to be levelled after breaking of clods and neatly dressed as per specifications.(S.R.of PWD 2016-17, P.No.5, I.No.2.2)							
	open gym platform (Ladies)	1	14.50	7.70	0.30	33.50		
	open gym platform (Gents)	1	13.00	9.15	0.30	35.69		
	Platform approach	2	2.50	1.50	0.30	2.25		
						Total	71.43	233.20
							Cum	16657.48
		220.00						
	Basic Rate	13.20						
	Area Weightage @ 6%	233.20						
	Total							
2	Earth work excavation for foundation of building, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in ordinary soil not exceeding 1.5m in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50m after breaking of clods complete as per specifications (KSB 2.1) (b) 2.3.5, P-5, 1-2.4)							
	Solid Blocks:- For Platform	2	13.00	0.30	0.25	1.95		
		2	8.55	0.30	0.25	1.28		
		2	14.50	0.30	0.25	2.18		
		2	7.30	0.30	0.25	1.10		
	Approach	4	2.50	0.30	0.20	0.60		
	Bicycle	2	0.60	0.60	0.60	0.43		
	Seated chest press	2	0.60	0.60	0.60	0.43		
	Self Weighted Rower	4	0.60	0.60	0.60	0.86		
	H D Sit -up-station	2	0.60	0.60	0.60	0.43		
	HD Squat Pushing	2	0.60	0.60	0.60	0.43		
	HD Mini Ski	2	0.60	0.60	0.60	0.43		
	H D Waist Twister	8	0.60	0.60	0.60	1.73		
	Tai Chi Spinner	2	0.60	0.60	0.60	0.43		
	Rider	2	0.60	0.60	0.60	0.43		
	Elliptical Corss trainer	2	0.60	0.60	0.60	0.43		
	Arm & Pedal Bike	2	0.60	0.60	0.60	0.43		
	Swing	8	0.60	0.60	0.60	1.73		
	SeeSaw	2	0.60	0.60	0.60	0.43		
	Slide	8	0.60	0.60	0.60	1.73		
						17.47	200.34	3500.04
							Cum	
		189.00						
	Basic rate	11.34						
	Area Weightage @ 6%	200.34						
	Total							
3	Refilling available earth around pipe lines, cables in layers not exceeding 20cms in depth, compacting each deposited layer by ramming after watering with lead upto 50m. and lift upto 1.5 m. including cost of all labour complete as per specifications.							
	open gym platform (Ladies)	1	14.50	7.70	0.20	22.33		
	open gym platform (Gents)	1	13.00	9.15	0.20	23.79		
	Platform approach	2	1.10	2.50	0.20	0.60		
						Total	46.72	80.56
								3764.00

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Sl. No	Description of work	No	Dimensions			qty	Rate/unit	Amount
			L	B	D			
	Basic Rate	76.00					Cum	
	Area weightage @ 6%	4.56						
	Total	80.56						
4	Construction of Embankment with Material Gravel/ Murrum. KSRRB M300-53. Construction of embankment with approved material Gravel/Murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300- 2 complete as per specifications.(Including cost of gravel / murrum, watering charges & compaction by vibratory roller to 95% of proctors density) MORTH Specification No. 305							
		1	14.50	7.70	0.45	50.24		
	Platform	1	13.00	9.15	0.45	53.53		
	Platform	2	1.10	1.50	0.45	1.49		
	Approach				Total	105.26	320.12	33694.00
							Cum	
	Basic Rate	302.00						
	Area weightage @ 6%	18.12						
	Total	320.12						
5	Providing and constructing load bearing wall with solid concrete blocks having block density not less than 1800kg/m3 having a minium average compressive strength of 5.00N/mm2 confirming to IS 2185 (PART-1) :2005 and constructed with CM1:4, as per IS 2572:2005 including cost of materials, labour charges, scaffolding, curing complete as per specifications.(solid concrete block of size 400x200x200mm.) P. No. 25 I. No.5.27.1							
	Kerb stone	2	8.95		0.45	8.06		
		2	13.00		0.45	11.70		
		2	14.50		0.45	13.05		
		2	7.30		0.45	6.57		
	For Approach	4	1.50		0.45	2.70		
						42.08	993.22	41789.73
							Nos	
	Basic Rate	937.00						
	Area weightage @ 6%	56.22						
	Total	993.22						
6	Providing and laying in position plain cement concrete of Mix CC 1:4:8 with OPC cement @ 180 kgs, with 40mm and down size graded granite metal coarse aggregates @ 0.85 cum and fine aggregates @ 0.57 cum machine mixed, concrete laid in layers not exceeding 15cms, thick, well compacted, in foundation including cost of all materials, labour HOM of machinery curing complete as per specification, specification No. KBS 4, 1, 4.2 (PageNo.12, Item No.4.3)							
	Platform	1	14.50	7.70	0.15	16.75		
	Platform	1	13.00	9.50	0.15	18.53		
	Approach	2	2.50	1.10	0.15	0.83		
	Solid Blocks:- For Platform	2	13.00	0.30	0.15	1.17		
		2	8.95	0.30	0.15	0.81		
		2	14.50	0.30	0.15	1.31		
		2	7.70	0.30	0.15	0.69		
	Approach	4	2.50	0.30	0.15	0.45		
	Bicycle	2	0.60	0.60	0.15	0.11		
	Seated chest press	2	0.60	0.60	0.15	0.11		
	Self Weighted Rower	4	0.60	0.60	0.15	0.22		
	H D Sit -up-station	2	0.60	0.60	0.15	0.11		
	HD Squat Pushing	2	0.60	0.60	0.15	0.11		
	HD Mini Ski	2	0.60	0.60	0.15	0.11		
	H D Waist Twister	8	0.60	0.60	0.15	0.43		
	Tai Chi Spinner	2	0.60	0.60	0.15	0.11		
	Rider	2	0.60	0.60	0.15	0.11		
	Elliptical Corss trainer	2	0.60	0.60	0.15	0.11		

Sl No	Description of work	No	Dimensions			qty	Rate/unit	Amount
			L	B	D			
	Arm & Pedal Bike	2	0.60	0.60	0.15	0.11		
	Swing	8	0.60	0.60	0.15	0.43		
	SeeSaw	2	0.60	0.60	0.15	0.11		
	Slide	8	0.60	0.60	0.15	0.43		
					Total	43.11	5159.02	222420.83
	Basic Rate	4867.00					Cum	
	Area Weightage @ 6%	292.02						
	Total	5159.02						
7	Providing and laying in position reinforced cement concrete of design mix M25 with OPC cement @ 340kgs, with 20mm and down size graded granite metal coarse aggregates @0.70cum and fine aggregates @ 0.47cum, with superplasticiser @3lts confirming to IS9103-1999 Reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in ground floor level for roof slabs, staircase, lintels and beams retaining walls, return walls, walls (any thickness) including attached pilasters, columns, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window cills, fillets etc., including cost of all materials, labour, HOM of machinery, curing, complete but excluding cost of reinforcement as per specifications. Page No:13 Item No:4.12							
	Platform	1	14.50	7.70	0.10	11.17		
	Platform	1	13.00	9.15	0.10	11.90		
	Approach	2	2.50	1.10	0.10	0.55		
	Bicycle -	2	0.60	0.60	0.15	0.11		
	Seated chest press	2	0.60	0.60	0.45	0.32		
	Self Weighted Rower	4	0.60	0.60	0.45	0.65		
	H D Sit -up-station	2	0.60	0.60	0.45	0.32		
	HD Squat Pushing	2	0.60	0.60	0.45	0.32		
	HD Mini Ski	2	0.60	0.60	0.45	0.32		
	H D Waist Twister	8	0.60	0.60	0.45	1.30		
	Tai Chi Spinner	2	0.60	0.60	0.45	0.32		
	Rider	2	0.60	0.60	0.45	0.32		
	Elliptical Corss trainer	2	0.60	0.60	0.45	0.32		
	Arm & Pedal Bike	2	0.60	0.60	0.45	0.32		
	Swing	8	0.60	0.60	0.45	1.30		
	SeeSaw	2	0.60	0.60	0.45	0.32		
	Slide	8	0.60	0.60	0.45	1.30		
					Total	31.17	6749.02	210366.95
	Basic Rate	6367.00					Cum	
	Area Weightage @ 6%	382.02						
	Total	6749.02						
8	Providing and fixing cement base precast, pre-polished cement concrete designer tiles 25mm thick conforming to IS 1237 heavy duty tiles for flooring, treads of steps and landing, laid on a bed of 12mm thick cement mortar 1:3 mix finished with flush pointing using white cement, including cost of materials, including cutting, gridding the edge to half/full round wherever required, labour curing complete as per specification. P.109, I. No.14.62							
	platform	1	14.50	7.70		111.65		
	platform	1	13.00	9.15		118.95		
	Approach	2	2.50	1.50		7.50		
					Total	238.10	1116.18	265762.46
	Basic Rate	1053.00					sqmt	
	Area weightage @ 6%	63.18						
	Total	1116.18						

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Sl. No	Description of work	No	Dimensions			qty	Rate/unit	Amount
			L	B	D			
9	Providing 20mm thick cement plaster in single coat with cement mortar 1:3 to stone masonry & concrete surface including rounding off corners wherever required smooth rendering, including providing and removing scaffolding, cost of materials, labour, curing etc., complete as per specification. P.114, I. No.15.19							
	Platform for Ladies	2	14.50		0.45	13.05		
		2	7.30		0.45	6.57		
	Platform for Gents	2	13.00		0.45	11.70		
		2	8.95		0.45	8.06		
	Approach	4	1.50		0.45	2.70		
					Total	42.08	248.04	10436.28
	Basic Rate	234.00					sqmt	
	Area weightage @ 6%	14.04						
	Total	248.04						
10	Providing and applying ready mix priming coat over concrete / masonry / asbestos cement sheet / plastered surfaces including preparing the surface after thoroughly cleaning of oil, grease, dirt and other foreign matter, and sand papering including cost of materials, labour, complete as per specifications.							
	Platform for Ladies	2	14.50		0.45	13.05		
		2	7.30		0.45	6.57		
	Platform for Gents	2	13.00		0.45	11.70		
		2	8.95		0.45	8.06		
	Approach	4	1.50		0.45	2.70		
					Total	42.08	27.56	1159.59
	Basic Rate	26.00					sqmt	
	Area weightage @ 6%	1.56						
	Total	27.56						
11	Painting on Concrete Surface KSRRB M2700-12. Providing and applying 2 coats of water based cement paint to unplastered concrete surface after cleaning the surface of dirt, dust, oil, grease, efflorescence and applying paint at of 1 litre for 2 sqm complete as per specifications MORTH Specification No. 800							
	Platform for Ladies	2	14.50		0.45	13.05		
		2	7.30		0.45	6.57		
	Platform for Gents	2	13.00		0.45	11.70		
		2	8.95		0.45	8.06		
	Approach	4	1.50		0.45	2.70		
					Total	42.08	66.78	2809.77
	Basic Rate	63.00					sqmt	
	Area weightage @ 6%	3.78						
	Total	66.78						
12	Supply and Fixing of Bicycle . Metal: All tubular steel of 2.5mm thickness are galvanized and zinc dipped. Joints are Robotic welded. All welded joints are scalloped as necessary and welded to an approved MIG process. All welds are dressed off removing all sharp edges and burrs. Zinc Primer Paint is applied at all the welding points prior to finishing. All metal parts are powder coated using AKZO Nobel-Great Wall powder to the thickness of 80-120 microns. All metal parts are tested in our salt spray machine that uses a 5% NaCl solution in accordance to ISO7227 to speed up corrosion for 3000 hrs. Rubber: High quality grip rubber is used for the handles. Bearings: Maintenance-free ball bearings. Scope of delivery: 1 completely pre-assembled equipment modules. Maintenance: Maintain according to EN 16630 and the maintenance guide. Safety: All products must be tested and certified to meet EN16630 safety standards only by a reputed notified international certifying agency such as IPEMA, TUV, CPSC, or SGS. The GS Mark- EN16630 Certificates must be in the name of tendering party and not any 3rd party. Size_L x W x H): 1000 x 498 x 1290 mm. Weight: 51.5 Kg Safety Area: 3400 x 3498 mm Capacity_1 Persons. Approved rates							

S. No	Description of work	No	Dimensions			qty	Rate/unit	Amount	
			L	B	D				
		2				2	125000	250000.00	
							Each		
13	Supply and fixing of Seated Chest Press . Metal: All tubular steel of 2.5mm thickness are galvanized and zinc dipped. Joints are Robotic welded. All welded joints are scalloped as necessary and welded to an approved MIG process. All welds are dressed off removing all sharp edges and burrs. Zinc Primer Paint is applied at all the welding points prior to finishing. All metal parts are powder coated using AKZO Nobel-Great Wall powder to the thickness of 80-120 microns. All metal parts are tested in our salt spray machine that uses a 5% NaCl solution in accordance to ISO7227 to speed up corrosion for 3000 hrs. Rubber: High quality grip rubber is used for the handles. Bearings: Maintenance-free ball bearings. Scope of delivery: 1 completely pre-assembled equipment modules. Maintenance: Maintain according to EN 16630 and the maintenance guide. Safety: All products must be tested and certified to meet EN16630 safety standards with GS test mark. The EN 16630 certificates must be issued by a reputed notified international certifying agency such as IPEMA, TUV, CPSC, or SGS only. The GS Mark- EN16630 Certificates must be in the name of tendering party and not any 3rd party. All products must clearly display the GS mark as has been issued in the EN16630 safety certificates. All products must carry a GS mark on it.. Size_L x W x H): 1955 x 733 x 2058 mm. Weight: 86.6 Kg Safety Area: 5545 x 4470 mm Capacity_2 Persons.Approved rates						2	230000	460000.00
		2					Each		
14	Supply and fixing of Self Weighted Rower . Metal: All tubular steel of 2.5mm thickness are galvanized and zinc dipped. Joints are Robotic welded. All welded joints are scalloped as necessary and welded to an approved MIG process. All welds are dressed off removing all sharp edges and burrs. Zinc Primer Paint is applied at all the welding points prior to finishing. All metal parts are powder coated using AKZO Nobel-Great Wall powder to the thickness of 80-120 microns. All metal parts are tested in our salt spray machine that uses a 5% NaCl solution in accordance to ISO7227 to speed up corrosion for 3000 hrs. Colour RAL 5019 Blue and RAL 1014 Beige Rubber: High quality grip rubber is used for the handles. Bearings: Maintenance-free ball bearings. Scope of delivery: 1 completely pre-assembled equipment modules. Maintain according to EN 16630 and the maintenance guide. Safety: All products must be tested and certified to meet EN16630 safety standards only by a reputed notified international certifying agency such as IPEMA, TUV, CPSC, or SGS. The GS Mark- EN16630 Certificates must be in the name of tendering party and not any 3rd party. All products must carry a GS mark on it.. Size_L x W x H): 1390 x 805 x 1100 mm. Weight: 42.4 Kg Safety Area: 3790 x 3205 mm Capacity_1 Person. Approved rates						2	165000	330000.00
		2					Each		

S. No	Description of work	No	Dimensions			qty	Rate/unit	Amount
			L	B	D			
15	Supply and Fixing of HD Sit Up Station . Metal: All tubular steel of 2.5mm thickness are galvanized and zinc dipped. Joints are Robotic welded. All welded joints are scalloped as necessary and welded to an approved MIG process. All welds are dressed off removing all sharp edges and burrs. Zinc Primer Paint is applied at all the welding points prior to finishing. All metal parts are powder coated using AKZO Nobel-Great Wall powder to the thickness of 80-120 microns. All metal parts are tested in our salt spray machine that uses a 5% NaCl solution in accordance to ISO7227 to speed up corrosion for 3000 hrs. Rubber: High quality grip rubber is used for the handles. Bearings: Maintenance-free ball bearings. Scope of delivery: 1 completely pre-assembled equipment modules. Maintenance: Maintain according to EN 16630 and the maintenance guide. Safety: All products must be tested and certified to meet EN16630 safety standards with GS test mark. The EN 16630 certificates must be issued by a reputed notified international certifying agency such as IPEMA, TUV, CPSC, or SGS only. The GS Mark- EN16630 Certificates must be in the name of tendering party and not any 3rd party. All products must clearly display the GS mark as has been issued in the EN16630 safety certificates. Size_L x W x H): 1412 x 1366 x 650 mm. Weight: 42.6 Kg Safety Area: 4462 x 4078 mm Capacity_2 Persons. Approved rates							
		2				2	125000	250000.00
							Each	
16	Supply and fixing of HD Squat Pushing . Metal: All tubular steel of 2.5mm thickness are galvanized and zinc dipped. Joints are Robotic welded. All welded joints are scalloped as necessary and welded to an approved MIG process. All welds are dressed off removing all sharp edges and burrs. Zinc Primer Paint is applied at all the welding points prior to finishing. All metal parts are powder coated using AKZO Nobel-Great Wall powder to the thickness of 80-120 microns. All metal parts are tested in our salt spray machine that uses a 5% NaCl solution in accordance to ISO7227 to speed up corrosion for 3000 hrs. Rubber: High quality grip rubber is used for the handles. Bearings: Maintenance-free ball bearings. Scope of delivery: 1 completely pre-assembled equipment modules. Maintenance: Maintain according to EN 16630 and the maintenance guide. Safety: All products must be tested and certified to meet EN16630 safety standards with GS test mark. The EN 16630 certificates must be issued by a reputed notified international certifying agency such as IPEMA, TUV, CPSC, or SGS only. The GS Mark- EN16630 Certificates must be in the name of tendering party and not any 3rd party. All products must clearly display the GS mark as has been issued in the EN16630 safety certificates. SizeL x W x H): 2270 x 635 x 1640 mm. Weight: 60.2Kg. Safety Area: 5300 * 3685mm. Capacity 2 Persons Approved rates							
		2				2	215000	430000.00
							Each	
17	Supply and Fixing of HD Mini Ski . Metal: All tubular steel of 2.5mm thickness are galvanized and zinc dipped. Joints are Robotic welded. All welded joints are scalloped as necessary and welded to an approved MIG process. All welds are dressed off removing all sharp edges and burrs. Zinc Primer Paint is applied at all the welding points prior to finishing. All metal parts are powder coated using AKZO Nobel-Great Wall powder to the thickness of 80-120 microns. All metal parts are tested in our salt spray machine that uses a 5% NaCl solution in accordance to ISO7227 to speed up corrosion for 3000 hrs. Rubber: High quality grip rubber is used for the handles. Bearings: Maintenance-free ball bearings. Scope of delivery: 1 completely pre-assembled equipment modules. Maintenance :Maintain according to EN 16630 and the maintenance guide. Safety: All products must be tested and certified to meet EN16630 safety standards with GS test mark. The EN 16630 certificates must be issued by a reputed notified international certifying agency such as IPEMA, TUV, CPSC, or SGS only. The GS Mark- EN16630 Certificates must be in the name of tendering party and not any 3rd party. All products must clearly display the GS mark as has been issued in the EN16630 safety certificates. Size_L x W x H): 1214 x 900 x 1347 mm. Weight: 45 Kg Safety Area: 4214 x 3900 mm Capacity_2 Persons Approved rates							

(13)

Sl. No	Description of work	No	Dimensions			qty	Rate/unit	Amount
			L	B	D			
		2				2	160000	320000.00
							Each	
18	Supply and fixing of HD Waist Twister . Metal: All tubular steel of 2.5mm thickness are galvanized and zinc dipped. Joints are Robotic welded. All welded joints are scalloped as necessary and welded to an approved MIG process. All welds are dressed off removing all sharp edges and burrs. Zinc Primer Paint is applied at all the welding points prior to finishing. All metal parts are powder coated using AKZO Nobel-Great Wall powder to the thickness of 80-120 microns. All metal parts are tested in our salt spray machine that uses a 5% NaCl solution in accordance to ISO7227 to speed up corrosion for 3000 hrs. Rubber: High quality grip rubber is used for the handles. Bearings: Maintenance-free ball bearings. Scope of delivery: 1 completely pre-assembled equipment modules. Maintenance : Maintain according to EN 16630 and the maintenance guide. Safety: All products must be tested and certified to meet EN16630 safety standards with GS test mark. The EN 16630 certificates must be issued by a reputed notified international certifying agency such as IPEMA, TUV, CPSC, or SGS only. The GS Mark- EN16630 Certificates must be in the name of tendering party and not any 3rd party. All products must clearly display the GS mark as has been issued in the EN16630 safety certificates. Size_L x W x H): 1460 x 1310 x 1150 mm. Weight: 39.1 Kg Safety Area: 4360 x 4510 mm Capacity_3 Persons Approved rates.							
		2				2	130000	260000.00
							Each	
19	Supply and Fixing of Tai Chi Spinners . Metal: All tubular steel of 2.5mm thickness are galvanized and zinc dipped. Joints are Robotic welded. All welded joints are scalloped as necessary and welded to an approved MIG process. All welds are dressed off removing all sharp edges and burrs. Zinc Primer Paint is applied at all the welding points prior to finishing. All metal parts are powder coated using AKZO Nobel-Great Wall powder to the thickness of 80-120 microns. All metal parts are tested in our salt spray machine that uses a 5% NaCl solution in accordance to ISO7227 to speed up corrosion for 3000 hrs. Colour RAL 5019 Blue and RAL 1014 Beige Rubber: High quality grip rubber is used for the handles. Bearings: Maintenance-free ball bearings. Scope of delivery: 1 completely pre-assembled equipment modules. Maintenance: Maintain according to EN 16630 and the maintenance guide. Safety: All products must be tested and certified to meet EN16630 safety standards with GS test mark. The EN 16630 certificates must be issued by a reputed notified international certifying agency such as IPEMA, TUV, CPSC, or SGS only. The GS Mark- EN16630 Certificates must be in the name of tendering party and not any 3rd party. The certificates must be attached with the tender document. All products must clearly display the GS mark as has been issued in the EN16630 safety certificates. Size_L x W x H): 1120 x 1150 x 1620 mm. Weight: 39 Kg Safety Area: 3520 x 3550 mm Capacity_3 Persons Approved rates							
		2				2	115000	230000.00
							Each	

(12)

Sl. No	Description of work	No	Dimensions			qty	Rate/unit	Amount
			L	B	D			
20	Supply and Fixing of Rider . Metal: All tubular steel of 2.5mm thickness are galvanized and zinc dipped. Joints are Robotic welded. All welded joints are scalloped as necessary and welded to an approved MIG process. All welds are dressed off removing all sharp edges and burrs. Zinc Primer Paint is applied at all the welding points prior to finishing. All metal parts are powder coated using AKZO Nobel-Great Wall powder to the thickness of 80-120 microns. All metal parts are tested in our salt spray machine that uses a 5% NaCl solution in accordance to ISO7227 to speed up corrosion for 3000 hrs. Rubber: High quality grip rubber is used for the handles. Bearings: Maintenance-free ball bearings. Scope of delivery: 1 completely pre-assembled equipment modules. Maintenance: Maintain according to EN 16630 and the maintenance guide. Safety: All products must be tested and certified to meet EN16630 safety standards with GS test mark. The EN 16630 certificates must be issued by a reputed notified international certifying agency such as IPEMA, TUV, CPSC, or SGS only. The GS Mark- EN16630 Certificates must be in the name of tendering party and not any 3rd party. All products must clearly display the GS mark as has been issued in the EN16630 safety certificates.. Size_L x W x H): 910 x 655 x 1270 mm. Weight: 29.5 Kg Safety Area: 3310 x 3000 mm Capacity_1 Person. Approved rates							
		2				2	90000	180000.00
							Each	
21	Supply and fixing of Elliptical Cross Trainer . Metal: All tubular steel of 2.5mm thickness are galvanized and zinc dipped. Joints are Robotic welded. All welded joints are scalloped as necessary and welded to an approved MIG process. All welds are dressed off removing all sharp edges and burrs. Zinc Primer Paint is applied at all the welding points prior to finishing. All metal parts are powder coated using AKZO Nobel-Great Wall powder to the thickness of 80-120 microns. All metal parts are tested in our salt spray machine that uses a 5% NaCl solution in accordance to ISO7227 to speed up corrosion for 3000 hrs. Rubber: High quality grip rubber is used for the handles. Bearings: Maintenance-free ball bearings. Scope of delivery: 1 completely pre-assembled equipment modules. Maintenance: Maintain according to EN 16630 and the maintenance guide. Safety: All products must be tested and certified to meet EN16630 safety standards with GS test mark. The EN 16630 certificates must be issued by a reputed notified international certifying agency such as IPEMA, TUV, CPSC, or SGS only. The GS Mark- EN16630 Certificates must be in the name of tendering party and not any 3rd party. The certificates must be attached with the tender document. All products must clearly display the GS mark as has been issued in the EN16630 safety certificates. Size_L x W x H): 1267 x 582 x 1764 mm. Weight: 43.5 Kg Safety Area: 4322 x 3632 mm Capacity_1 Person. Approved rates							
		2				2	140000	280000.00
							Each	
22	Supply and Fixing of Arm & Pedal Bike . Metal: All tubular steel of 2.5mm thickness are galvanized and zinc dipped. Joints are Robotic welded. All welded joints are scalloped as necessary and welded to an approved MIG process. All welds are dressed off removing all sharp edges and burrs. Zinc Primer Paint is applied at all the welding points prior to finishing. All metal parts are powder coated using AKZO Nobel-Great Wall powder to the thickness of 80-120 microns. All metal parts are tested in our salt spray machine that uses a 5% NaCl solution in accordance to ISO7227 to speed up corrosion for 3000 hrs. Rubber: High quality grip rubber is used for the handles. Bearings: Maintenance-free ball bearings. Scope of delivery: 1 completely pre-assembled equipment modules. Maintenance: Maintain according to EN 16630 and the maintenance guide. Safety: All products must be tested and certified to meet EN16630 safety standards only by a reputed notified international certifying agency such as IPEMA, TUV, CPSC, or SGS. The GS Mark- EN16630 Certificates must be in the name of tendering party and not any 3rd party. Size_L x W x H): 830 x 500 x 1450 mm. Weight: 32 Kg Safety Area: 3830 x 2900 mm Capacity_1 Persons. Approved rates							

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Sl. No	Description of work	No	Dimensions			qty	Rate/unit	Amount
			L	B	D			
		2				2	170000	340000.00
							Each	
23	Supply and fixing of A Swing . This equipment comprises of 2 No. A shaped Frame and Toprail made of Dia. 76 mm galvanized steel tubes and wall thickness of 2 mm(The quality of steel meets with the requirement of GB / T 700-1988). The swing chains are made from galvanized steel which is rubberize coated of dia 6mm and length 1400mm. The swing chains are connected to the top rail using a specialized Clamp connector. #6201 bearing is used to connect the clamp & chain ,which is made as the standard GB/T276-2013. Installation: Refer Installation Manual for details. Size (L x W x H): 2585x 500 x 2000 mm. Safety Area: 4900 x 5400 mm. Weight: Approx 45Kg. Children capacity: 2. This equipment to comply with EN 1176 Safety certification standards.Approved rates							
		1				1	150000	150000.00
							Each	
24	Supply and fixing of 2 Seater See Saw . The Frame and Support Post is made of Dia. 114 mm galvanized steel tubes and wall thickness of 2.5mm(The quality of steel meets with the requirement of GB / T 700-1988). The welding used is CO2 shielded arc welding (meets with the requirement of BS1387-1985, and the technology used meets the requirement of the BS1387- 1985) and welding is done by robotic welding. The handrail and foot rest is made of Dia. 32 mm steel tubes and wall thickness of 2 mm(The quality of steel meets with the requirement of GB / T 700-1988). The welding used is CO2 shielded arc welding (meets with the requirement of BS1387-1985, and the technology used meets the requirement of the BS1387- 1985) and welding is done by robotic welding. The seat is made from virgin Korean LLDPE, shaped by Rotational molding and strictly conforms to GB/T 4454-1996. The thickness of plastic is of 6 mm, colorful, UV resistant, anti-static and will not fade easily. Also it is safe and environmental friendly. All accessories such as Nuts and Bolts are made from stainless steel 304#. Installation: Refer Installation Manual for details. Size (L x W x H): 1800x 500 x 855 mm . Safety Area: 4100 x 2900 mm. Weight: Approx 36Kg. Children capacity: 2. This equipment to comply with EN 1176 Safety certification standards.Approved rates							
		1				1	97000	97000.00
							Each	
25	Supply and fixing of 1.2 MTR Wave Slide : "A" shaped support posts of height 1.85 m, are to be schedule Galvanized steel with a 60mm OD {Outer Diameter}.All the posts are to be finished with a baked on powder coat finish. Powder coatings used TGIC Polyester powder. Electro - statically applied polyester powder must have a tough finish with maximum durability. The pretreatment and curing process includes Acid wash > freshwater rinse > iron phosphate rinse > final rinse > rust prevention treatment > seal & dry-off > oven baked electro-static powder application and dual zone curing in the oven > QC Controls > Final finish. Finished products have the following typical characteristics: 0.5mm thickness, oven cured between 191oCand 220oC, to achieve Flexibility, Impact, Salt Spray {Corrosion} Resistance, Hardness, and Adhesion. Specialized connectors such as clamps and couplings are to be cast from aluminum which is pretreated, and cured, with a baked on powder coat finish. Deck of size 0.7 m x .595 m and Staircase of size 1.08 m x 0.60 m shall be an all-PATENT welded assembly fabricated from perforated solid punched steel. Deck perimeter is precision pre punched for attachments. Decks are pre pressed, punched, and welded, powder coated to 2.2mm thickness or vinyl plastic coated to a thickness of 4mm [optional]. Handrail of height 1.36 m and Dia 32 mm shall be an all-patent welded unit, fabricated from 32 O.D. galvanized steel pipes with a baked on powder coating finish. Bolts, nuts, screws, washers and etc used for assembly shall be stainless steel 304 grade and shall be of tamper resistant stainless steel.							

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Sl. No	Description of work	No	Dimensions			qty	Rate/unit	Amount
			L	B	D			
	Exposed hardware shall be covered with ultra violet stabilized plastic safety caps as a safety feature against protruding hardware, aesthetic pleasing against ugly exposed hardware and prevention against vandalism as well. Wavey Slide of size 2.37 m x 0.55 m x 1.4 m, Panels, Plastic Components [super thick plastic] shall be rotationally molded from antistatic, copolymer, virgin linear low density UV stabilized polyethylene, with "color molded" in not "added in". All rotational molding is carried out in state of the art, precision, bi axial roto moulding machines which helps achieve guaranteed uniform wall thickness, seamless joints, accurate process control, one part construction to make it stress free. ALL WELDING IS CARRIED OUT BY ROBOTS [SIMILIAR TO THE ONES USED IN THE AUTOMOBILE INDUSTRY], WHICH GUARANTEES STRONG AND SMOOTH WELDS ELIMINATING ANY RAG, WELD SCARS AND ENSURES THE INTEGRITY AND STRENGTH OF THE WELDED AREAS. Size L x W x H: 339 x 810 x 1850 mm. Safety Area: 7190 x 4400 mm. Approved rates	1				1	180000	180000.00
							Each	
26	Supply and Fixing of Elephant Rider Frame made of High density Polyethylene(HDPE) of size 900mm x 250mm x 575mm and 15mm thickness which meets the GB/T13663-2000 standard. The HDPE used is UVStabilized, heat resistant, Non toxic and anti color fade. Spring of dia 150 mm, thickness of 20 mm and height of 330 mm made of hot rolled spring steel coil of grade GB-1222 or equivalent. Installation: Refer Installation Manual for details. Size (L x W x H): 900 x 250 x 900 mm. Safety Area: 1300 x 650 mm. Weight: Approx 22 Kg Children capacity: 1. This equipment to comply with EN 1176 Safety certification standards. Approved rates	1				1	43992.00	43992.00
							Each	
27	Supply and Fixing of Puppy Dog Rider. Frame made of High density Polyethylene(HDPE) of size 900mm x 250mm x 575mm and 15mm thickness which meets the GB/T13663-2000 standard. The HDPE used is UVStabilized, heat resistant, Non toxic and anti color fade. Spring of dia 150 mm, thickness of 20 mm and height of 330 mm made of hot rolled spring steel coil of grade GB-1222 or equivalent. Installation: Refer Installation Manual for details. Size (L x W x H): 900 x 250 x 900 mm. Safety Area: 1300 x 650 mm. Weight: Approx 22 Kg Children capacity: 1. This equipment to comply with EN 1176 Safety certification standards Approved rates	1				1	43992.00	43992.00
							Each	

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Sl. No	Description of work	No	Dimensions			qty	Rate/unit	Amount
			L	B	D			
28	Supply and fixing of Celeste Climber :Upright structural posts of height 1.8 m are to be schedule Galvanized steel with a 114mm OD {Outer Diameter}.All the posts are to be finished with a baked on powder coat finish. Powder coatings used TGIC Polyester powder. Electro - statically applied polyester powder must have a tough finish with maximum durability. The pretreatment and curing process includes Acid wash > freshwater rinse > iron phosphate rinse > final rinse > rust prevention treatment > seal & dry-off > oven baked electro-static powder application and dual zone curing in the oven > QC Controls > Final finish. Finished products have the following typical characteristics: 0.5mm thickness, oven cured between 191oCand 220oC, to achieve Flexibility, Impact, Salt Spray {Corrosion} Resistance, Hardness, and Adhesion. Specialized connectors such as clamps and couplings are to be cast from aluminum which is pretreated, and cured, with a baked on powder coat finish. Bolts, nuts, screws, washers and etc used for assembly shall be stainless steel 304 grade and shall be of tamper resistant stainless steel. Exposed hardware shall be covered with ultra violet stabilized plastic safety caps as a safety feature against protruding hardware, aesthetic pleasing against ugly exposed hardware and prevention against vandalism as well. Plastic Climber of size 1.16 m x 0.95 m x 1.73 m [super thick plastic] shall be rotationally molded from antistatic, copolymer, virgin linear low density UV stabilized polyethylene, with "color molded" in not "added in". All rotational molding is carried out in state of the art, precision, bi axial roto moulding machines which helps achieve guaranteed uniform wall thickness, seamless joints, accurate process control, one part construction to make it stress free. ALL WELDING IS CARRIED OUT BY ROBOTS [SIMMILIAR TO THE ONES USED IN THE AUTOMOBILE INDUSTRY], WHICH GUARANTEES STRONG AND SMOOTH WELDS ELIMINATING ANY RAG, WELD SCARS AND ENSURES THE INTEGRITY AND STRENGTH OF THE WELDED AREAS. Size_L x W x H): 2100 x 1800 x 1800 mm. Safety Area: 4600 x 9000 mm Approved Rates	1				1	177381.00	177381.00
							Each	
29	Supply and Fixing of Creepy Crawly : Wave shaped support posts of height 2.2 m are to be schedule Galvanized steel with a 48 mm OD {Outer Diameter}.All the posts are to be finished with a baked on powder coat finish. Powder coatings used TGIC Polyester powder. Electro - statically applied polyester powder must have a tough finish with maximum durability. The pretreatment and curing process includes Acid wash > freshwater rinse > iron phosphate rinse > final rinse > rust prevention treatment > seal & dry-off > oven baked electro-static powder application and dual zone curing in the oven > QC Controls > Final finish. Finished products have the following typical characteristics: 0.5mm thickness, oven cured between 191oCand 220oC, to achieve Flexibility, Impact, Salt Spray {Corrosion} Resistance, Hardness, and Adhesion. Specialized connectors such as clamps and couplings are to be cast from aluminum which is pretreated, and cured, with a baked on powder coat finish. Curved Handrail of size 0.67 m x 0.37 and Dia 32 mm shall be an all-patent welded unit, fabricated from 32 O.D. galvanized steel pipes with a baked on powder coating finish. Bolts, nuts, screws, washers and etc used for assembly shall be stainless steel 304 grade and shall be of tamper resistant stainless steel. Exposed hardware shall be covered with ultra violet stabilized plastic safety caps as a safety feature against protruding hardware, aesthetic pleasing against ugly exposed hardware and prevention against vandalism as well. ALL WELDING IS CARRIED OUT BY ROBOTS [SIMMILIAR TO THE ONES USED IN THE AUTOMOBILE INDUSTRY], WHICH GUARANTEES STRONG AND SMOOTH WELDS ELIMINATING ANY RAG, WELD SCARS AND ENSURES THE INTEGRITY AND STRENGTH OF THE WELDED AREAS. Size_L x W x H): 4500 x 700 x 2200 mm. Safety Area: 7500 x 3700 mm Approved Rates	1				1	160377.00	160377.00
							Each	

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Sl. No	Description of work	No	Dimensions			qty	Rate/unit	Amount
			L	B	D			
30	Lead for earthwork and disposal of debris shall be payable at carriage rates by mechanical means including loading and unloading for earthwork (upto 10 kms) complete with all lead & lift & as per the direction of the Engineer in charges. (S.R.of PW,P & IWTD, SR 2016-17							
	For 10k.m	10x1.3x2=		26.00				
	Loading & unloading			68.00				
				94.00				
				5.64				
	A.W 6% =			99.64				
	Total =					42.18		
	Qty item No9.1 , 2				Total	42.18	99.64	4202.87
							cum	
							Miscellaneous	694.01
							GRAND TOTAL Rs.	5000000.00

In Word : Rupees fifty Lakhs only.

Certificate

1. The work spot has been inspected and the work is found necessary
2. This estimate is prepared as per C.S.R. of 2016-17 & approved data rate.
3. This provisions were made in this estimate are necessary and adequate
4. This work comes under B.B.M.P limits

Asst. Engineer
Project Division,

N. Ch 18h 27/07/17
Asst. Executive Engineer Project
Project Division, Yelahanka Zone, BBMP

Executive Engineer project
Project Division, Yelahanka Zone
BBMP, Bangalore-92.

Administrative Approval

Accorded For 50.00 Lakhs.
Head of A/C P-3158
CER NO : 66/13-18 Dt: 28-11-2017

E.E. (Project)
28/11

Technical Sanction

Accorded For 50.00 Lakhs.
Head of A/C P-3158
CER NO : 167 Dt: 01/08/17

TA
CE (YNK)